

Amendments to the Claims

Please amend claims 1-3 and 5-8 as shown in the following listing of claims. This listing of claims will replace all prior versions, and listings, of claims in the application.

- 1 1. (currently amended) A method of assessing the quality of skin print images, and particularly fingerprint images, characterized in that gradients are calculated formed for ~~the individual picture elements (pixels) pixels of a skin print image of the skin print images~~ such that a gradient is calculated for each pixel of the skin print image, in that a mean value is derived formed from the gradients of the pixels in ~~one~~ each region of the skin print image ~~the image (tile)~~ at a time, and in that similarities in the mean values from region to region tile to tile form a measure of quality.
- 1 2. (currently amended) A method as claimed in claim 1, characterized in that the gradients calculated formed initially, which have the components $g_{x(\text{alt})}$ and $g_{y(\text{alt})}$, are squared after the fashion of a complex number by the formulas $g_x = g_{x(\text{alt})}^2 - g_{y(\text{alt})}^2$ and $g_y = 2g_{x(\text{alt})} * g_{y(\text{alt})}$.
- 1 3. (currently amended) A method as claimed in claim 1, characterized in that the mean values are entered in two directional matrices for x and y, in that scalar products are formed of the directional matrices together with the matrices that are displaced horizontally, vertically and in the directions of both diagonals by one region tile, in that each of the products that were obtained in that way by multiplying the matrices are summed over all the ~~tiles~~ regions of the skin print image, and in that the sums are added together and are divided by the sum of the scalar products of the directional matrices with themselves in order to calculate form the quality measure, said sum of the scalar products of the directional matrices with themselves being summed up over all the regions all tiles.

1 4. (previously amended) A method as claimed in claim 1, characterized in
2 that the lengths of the average gradients are used to determine a region of interest
3 of the skin print that has been scanned.

1 5. (currently amended) An arrangement for assessing the quality of skin print
2 images, and particularly fingerprint images, characterized by a system for
3 calculating forming

4 gradients for ~~the individual picture elements (pixels) pixels of a skin print~~
5 ~~image of the skin print image such that a gradient is calculated for each pixel of~~
6 ~~the skin print image,~~

7 a mean value derived from the gradients of the pixels in ~~one~~ each region of
8 ~~the skin print image the image (tile) at a time, and~~

9 a measure of quality from similarities in the mean values from region to
10 region tile to tile.

1 6. (currently amended) An arrangement as claimed in claim 5, characterized
2 in that the system ~~for forming the gradients for the individual picture elements~~
3 ~~(pixels) of the skin print image and for forming the mean value from the gradients~~
4 ~~of the pixels in one region of the image (tile) at a time~~ is arranged to square ~~the~~
5 initially calculated formed gradients, which have the components $g_x(\text{alt})$ and $g_y(\text{alt})$,
6 after the fashion of a complex number by the formulas $g_x = g_x(\text{alt})^2 - g_y(\text{alt})^2$ and $g_y =$
7 $2g_x(\text{alt}) * g_y(\text{alt})$.

1 7. (currently amended) An arrangement as claimed in claim 5, characterized
2 in that the system ~~for forming the measure of quality from similarities in the mean~~
3 ~~values from tile to tile~~ is arranged

4 to enter the mean values in two directional matrices for x and y,
5 to form scalar products of the directional matrices having matrices that are
6 displaced horizontally, vertically and in the directions of both diagonals by one
7 region tile,

8 to sum, over all the ~~tiles~~ regions of the skin print image, each of the
9 products that are obtained by multiplying the matrices, and

10 to form the quality measure by adding the sums together and dividing the
11 scalar products of the directional matrices, said scalar products having been
12 summed over all the regions ~~tiles~~, by themselves.

1 8. (currently amended) An arrangement as claimed in claim 5, characterized
2 in that the system ~~for forming gradients for the individual picture elements~~
3 ~~(pixels) of the skin print image and for forming a mean value from the gradients~~
4 ~~of the pixels in one region of the image (tile) at a time~~ is arranged to determine,
5 from the lengths of the averages gradients, a region of interest of the skin print
6 that has been scanned.